

# The role of asthma guidelines in achieving current control and reducing future risk

J. Mark FitzGerald

Institute for Heart and Lung Health, University of British Columbia, Vancouver, BC, Canada

**Address for correspondence:**

Prof. J Mark FitzGerald, Institute for Heart and Lung Health, The Lung Centre, 7th Floor, Gordon and Leslie Diamond Health Care Centre, 2775 Laurel Street, Vancouver, B.C. V5Z 1M9, Canada.  
E-mail: [mark.fitzgerald@vch.ca](mailto:mark.fitzgerald@vch.ca)

Submission: 23-09-12  
Accepted: 23-09-12

Asthma is a chronic inflammatory disease that is associated with fluctuating control, based on factors such as allergen exposure and viral infections. This fluctuation in symptoms gives rise to the challenge of motivating patients to take medications when they feel well and also to respond to a worsening of their asthma control by adjusting the antiinflammatory component of treatment at such time. It remains a major public health burden and from a public health perspective is a major driver of health care costs.<sup>[1]</sup> Ultimately, of course, in the absence of access to medications, appropriate education on how to use medications, especially at the time asthma worsens, the patient will commonly have poorly controlled asthma. In addition, we now recognize the heterogeneity of asthma especially in terms of severe asthma and that currently available therapies are not adequate to achieve control.

It is against this background that the Saudi Thoracic Society is to be congratulated in updating their previously published guidelines developed by the Saudi Initiative for Asthma (SINA) group.<sup>[2]</sup> Guidelines provide a useful framework for developing a management strategy for asthma.<sup>[3]</sup> By identifying evidence-based recommendations they not only help the clinician manage their patients but it also facilitates discussion with providers to ensure that the necessary drugs are available. Guidelines are expensive to produce and it is not imperative for every country or region to develop an evidence base, as there are a number of respected evidence-based guidelines available including most notably the Global Initiative in Asthma (GINA).<sup>[4]</sup> The strategy adopted for the guidelines developed by the SINA group is an ideal example of how such a statement can be adapted to local needs. The authors have provided a concise review of the pathophysiology of asthma and the central message of the pivotal importance of inflammation in asthma as a framework for considering the need for regular antiinflammatory therapy. They also provide important regional epidemiological data to

allow the clinician put in context the public health dimension of the problem, which a clinical level may not always be appreciated.

Subsequently they emphasize the essential nature of inhaled corticosteroids as the primary core treatment of asthma. It is the foundation entry level treatment for all but the mildest asthma, which not only ensures excellent asthma control for most mild asthma patients, but also has been shown to have a significant protective effect in reducing the risk of asthma deaths. Prior to adding further therapy, in the presence of ongoing poor asthma control, it is important not to adjust therapy before addressing issues of adherence but also to ensure the patient is using the correct inhaler technique when taking their medication. It is the accepted practice that in such situations there is little benefit in increasing the dose of inhaled corticosteroids but rather the addition of a long acting beta agonist not only achieves better symptom control but also significantly reduces the risk of exacerbations.<sup>[5,6]</sup>

In the presence of ongoing poor control the patient becomes categorized as having difficult asthma. Again the current document has recognized the implications of this challenging group of patients by including a new section to help manage this patient group. Before embarking on the use of expensive additional therapy such as omalizumab or the emerging new therapy: bronchial thermoplasty, it is important to pause and reassess the patient completely. There are many examples of patients being referred to a specialist center with the designation of being a patient with difficulty to control asthma, only for them to be found to have adherence issues or no asthma, most notably in the presence of vocal cord dysfunction. It is at this stage and it is also important to ensure that such issues as rhinosinusitis, obesity, gastroesophageal reflux, and ongoing cigarette smoking, which reduces the efficacy of inhaled corticosteroids have been addressed.

Difficult to control asthma is a heterogeneous

<b>Access this article online</b>
<b>Quick Response Code:</b>

<b>Website:</b> <a href="http://www.thoracicmedicine.org">www.thoracicmedicine.org</a>
<b>DOI:</b> 10.4103/1817-1737.102143

disorder, which will likely require targeted therapy by using assessment of airway inflammation using sputum assessments for the presence of eosinophilia, to guide treatment. Currently, the therapeutic options in this regard are limited. There is emerging evidence that treatment with the anti IL 5 monoclonal antibody, mepolizumab, will have important effects on exacerbation risk.<sup>[7]</sup> The heterogeneity of the disorder will ensure that we will need additional therapies to target the different sub groups.

The stimulus for better treatment of this group of patients lies not only in the abysmal quality of life that they have but also the huge economic burden they place on the health care system. We have recently shown in British Columbia that 4% of patients with severe asthma consume 50% of the indirect health care costs for asthma in that Province. Also not surprisingly across all patient groups it is the uncontrolled asthma patient, even with mild asthma, that also drive health care costs. Given that the costs of the emerging new treatments as well as the currently available omalizumab, it will be important to have robust economic evaluations of such expensive asthma treatments to ensure that payers can be convinced that they will have an impact on reducing not only patient related outcomes but also confirm the impression that they may also have the benefit of reducing the total asthma cost burden.

The challenge now remains for taking this comprehensive framework for asthma care and translating it into better outcomes in the region. Our patients deserve that we focus

on achieving this goal. Better patient outcomes will also help reduce total asthma costs.

## References

1. Bahadori K, Doyle-Waters MM, Marra C, Lynd L, Alasaly K, Swiston J, *et al.* Economic burden of asthma: A systematic review. *BMC Pulm Med* 2009;9:24.
2. Al-Moamary MS, Al-Hajjaj MS, Idrees MM, Zeitouni MO, Alanezi MO, Al-Jahdal HH, *et al.* The Saudi Initiative for asthma. *Ann Thorac Med* 2009;4:216-33.
3. Al-Moamary MS, Al-Hajjaj SA, Al-Ghobain MS, Idrees MA, Zeitouni MM, Al-Harbi MO, *et al.* The Saudi Initiative for Asthma-2012 Update: Guidelines for the Diagnosis and Management of Asthma in Adults and Children. *Ann Thorac Med* 2012;7:175-203.
4. Bateman ED, Hurd SS, Barnes PJ, Bousquet J, Drazen JM, FitzGerald M, *et al.* Global strategy for asthma management and prevention: GINA executive summary. *Eur Respir J* 2008;31:143-78.
5. Shahidi N, FitzGerald JM. Current recommendations for the treatment of mild asthma. *J Asthma Allergy* 2010;3:169-76.
6. FitzGerald JM, Shahidi N. Achieving asthma control in patients with moderate disease. *J Allergy Clin Immunol* 2010;125:307-11.
7. Pavord ID, Korn S, Howarth P, Bleecker ER, Buhl R, Keene ON, *et al.* Mepolizumab for severe eosinophilic asthma (DREAM): A multicentre, double-blind, placebo-controlled trial. *Lancet* 2012;380:651-9.

**How to cite this article:** FitzGerald JM. The role of asthma guidelines in achieving current control and reducing future risk. *Ann Thorac Med* 2012;7:173-4.

## Author Help: Online submission of the manuscripts

Articles can be submitted online from <http://www.journalonweb.com>. For online submission, the articles should be prepared in two files (first page file and article file). Images should be submitted separately.

1) **First Page File:**

Prepare the title page, covering letter, acknowledgement etc. using a word processor program. All information related to your identity should be included here. Use text/rtf/doc/pdf files. Do not zip the files.

2) **Article File:**

The main text of the article, beginning with the Abstract to References (including tables) should be in this file. Do not include any information (such as acknowledgement, your names in page headers etc.) in this file. Use text/rtf/doc/pdf files. Do not zip the files. Limit the file size to 1 MB. Do not incorporate images in the file. If file size is large, graphs can be submitted separately as images, without their being incorporated in the article file. This will reduce the size of the file.

3) **Images:**

Submit good quality color images. Each image should be less than **4 MB** in size. The size of the image can be reduced by decreasing the actual height and width of the images (keep up to about 6 inches and up to about 1800 x 1200 pixels). JPEG is the most suitable file format. The image quality should be good enough to judge the scientific value of the image. For the purpose of printing, always retain a good quality, high resolution image. This high resolution image should be sent to the editorial office at the time of sending a revised article.

4) **Legends:**

Legends for the figures/images should be included at the end of the article file.